

CHEATSHEET FOR: ANNUAL AIR MONITORING NETWORK PLAN CHECKLIST

Key:

Yellow = Major: We cannot determine that an area is clean when an area does not have the required number of sites or lacks a design value site.

- This applies for NAAQS comparison only
- All other elements affect decisions on a case-by-case basis

Blue = Moderate: Given the objectives above, the following types of items are suggested to be considered moderate:

- Items that are used to determine network design adequacy (e.g., sampling schedule, co-location, tree distance, probe height)
- Items that specifically require approval per CFR (e.g., sampling waivers and site closures/moves)
- Items that result in questionable data (e.g., lack of QA checks and audits)

Pink = Minor: These items are required to be included per CFR but do not undermine the value of the ANPs or the monitoring data if they are missing/incorrect or if the requirement is not met (e.g., method and POC codes for non-PM instruments, missing the July 1st deadline, monitoring objective, co-location distance, start date).

Blue/Pink = typically minor but could be moderate in pollutant- or case-specific instances (see comments attached to these rows)

Green = Items that are needed to evaluate the “major” category (e.g., traffic count + distance to road + MSA + scale = ozone minimum monitoring requirements). On their own they are typically minor but if they contribute to a major issue then they are listed with the major issue.

White = none of these categories.

	ANP requirement	Citation within 40 CFR 58	Regulation	Action if info is missing (i.e., no information or incomplete) or incorrect	Action if req. is not met (assumes correct info submitted)	Notes on req.	Informs network adeq?	Critical for ANP app? ¹
1.	Submit plan by July 1 st	58.10 (a)(1)	Beginning 7/1/01, the State or local agency shall adopt and submit to the RA an annual monitoring network plan.	Request plan be submitted ASAP.	ANP approval can happen within 120 days of when delinquent plan is received	shall submit	N	N

¹ This identifies critical criteria for approval (i.e., partial disapproval if requirement is not met). All other network plan information is WOE.

Critical is based on:

- 40 CFR 58.10 says “must include” or “shall provide”
- 40 CFR 58, App A – pick the critical ones and all else WOE
- 40 CFR 58, App C – ID as critical if requirement is “must”
- 40 CFR 58, App D – ID as critical if requirement is “must”
- 40 CFR 58, App E – none are critical since these need to be followed “to the extent possible”

	ANP requirement	Citation within 40 CFR 58	Regulation	Action if info is missing (i.e., no information or incomplete) or incorrect	Action if req. is not met (assumes correct info submitted)	Notes on req.	Informs network adeq?	Critical for ANP app? ¹
2.	Statement of purpose for each monitor	58.10 (a)(1)	The plan shall include a statement of purposes for each monitor...	Add/correct in following year's plan and withhold approval of that portion	N/A – req. met if complete info submitted	Shall include	N	Y
3.	30-day public comment / inspection period	58.10 (a)(1), 58.10 (a)(2)	Comment period required by either EPA or S/L/T agency if modifications are proposed to the SLAMS network. Otherwise a 30-day inspection period is required by the S/L/T agency.	Request information from agency. If no comment period has occurred, request that the agency put out the plan for comment and resubmit. Do not review plan until there has been a public comment period.	If no comment period has occurred, request that the agency put out the plan for comment and resubmit. Do not review plan until there has been a public comment period.	Shall/must provide	N	Y
4.	Modifications to SLAMS network – case when we are not approving actual system modifications (i.e., we will do it outside the ANP process)	58.10 (a)(2) 58.10(e)	-Any plan with modifications is subject to RA approval -Include info on any proposals to remove or move a monitoring station within a period of 18 months following plan submittal.	Add/correct in following year's plan and withhold approval of that portion	N/A – req. met if correct info submitted	Subject to approval by RA	N	Y
5.	Modifications to SLAMS network – case when we are approving actual system modifications	58.10 (a)(2) 58.10 (b)(5) 58.10(e) 58.14 (c)	See item 4 plus must meet criteria established in 58.14(c)	Add/correct in following year's plan or letter and withhold approval of that portion	If 58.14(c) has not been met then withhold approval of system modification but can approve that the plan included the list of modifications	Subject to approval by RA	N	Y
6.	Does plan include documentation (e.g., attached approval letter) for system modifications that have been approved since last ANP approval?			Add/correct in next year's plan and include a comment in the detailed comments.	N/A – req. met if correct info submitted	No formal requirement but OGC request	Y	N
7.	NCore plan submitted	58.10 (a)(3)	The plan for	Ask for plan ASAP	N/A – HQ app.	Shall	N	N

	ANP requirement	Citation within 40 CFR 58	Regulation	Action if info is missing (i.e., no information or incomplete) or incorrect	Action if req. is not met (assumes correct info submitted)	Notes on req.	Informs network adeq?	Critical for ANP app? ¹
	to Admin. by 7/1/2009		establishing required NCore multipollutant stations should be submitted to the Admin. no later than 7/1/09.			HQ app.		
8.	NCore site operational (by 1/1/2011)	58.10 (a)(3)	The plan shall provide for all required stations to be operational by 1/1/11.	Add/correct in following year's plan and withhold approval of that portion. [Note: it is unimportant whether they were late: the material issue is whether they are currently operational.]	Withhold approval of that portion	Plan shall provide for ... HQ app.	N	Y
9.	Pb plan for ≥1.0 tpy sources submitted by 7/1/2009	58.10 (a)(4)	A plan for establishing source-oriented Pb monitoring sites for Pb sources emitting =>1.0 tpy shall be submitted to the RA no later than 7/1/09.	Not needed in plans after 2009		Shall	N	Y
10.	Pb site for ≥1.0 tpy sources operational by 1/1/2010	58.10 (a)(4)	The plan shall provide for the required source-oriented Pb monitoring sites for Pb sources emitting =>1.0 tpy to be operational by 1/1/10.	Not needed in plans after 2009		Plan shall provide for ...	Y	Y
11.	Pb plan for 0.5-1.0 tpy submitted by 7/1/2011	58.10 (a)(4)	A plan for establishing source-oriented Pb monitoring sites for Pb sources emitting =>0.5, but <1.0 tpy shall be submitted to the RA no later than 7/1/11.	Not needed in plans after 2009		Shall	N	Y
12.	Pb site for 0.5-1.0 tpy sources operational (by	58.10 (a)(4)	The plan shall provide for the required source-	Add/correct in following year's plan	Withhold approval of that portion	Plan shall provide for ...	Y	N

	ANP requirement	Citation within 40 CFR 58	Regulation	Action if info is missing (i.e., no information or incomplete) or incorrect	Action if req. is not met (assumes correct info submitted)	Notes on req.	Informs network adeq?	Critical for ANP app? ¹
			oriented Pb monitoring sites for Pb sources emitting $\Rightarrow >0.5$, but <1.0 tpy to be operational by 12/27/11.	and withhold approval of that portion. [Note: it is unimportant whether they were late: the material issue is whether they are currently operational.]				
13.	NO2 plan for area-wide and RA40 sites submitted by 7/1/2012	58.10 (a)(5)	A plan for establishing NO2 monitoring sites shall be submitted to the Admin. no later than 7/1/12.	Add/correct in following year's plan and withhold approval of that portion.	2012: Withhold approval of that portion since HQ app.	Shall HQ app.	N	N
14.	NO2 area-wide and RA40 sites operational by 1/1/2013	58.10 (a)(5)		Add/correct in following year's plan and withhold approval of that portion.	Withhold approval of that portion.	Plan shall provide for ...	Y – starting in 2013 ANPs	Y – starting in 2013 ANPs
15.	NO2 plan for near-road sites submitted by 7/1/2012	58.10 (a)(5)	A plan for establishing NO2 monitoring sites shall be submitted to the Admin. no later than 7/1/12.	Ask for separate plan ASAP (public comment period required).	2012: Withhold approval of that portion since HQ app.	Shall HQ app.	N	N
16.	NO2 near-road sites operational by ? (N/A until 2013 or 2014 plans)	58.10 (a)(5)		Add/correct in following year's plan and withhold approval of that portion.	Withhold approval of that portion ?	Plan shall provide for ...	Y – starting in 2013 or 2014 ANPs (dep on rule change)	Y – starting in 2013 or 2014 ANPs (dep on rule change)
17.	SO2 plan for PWEI sites submitted by 2011	58.10 (a)(6)	A plan for establishing SO2 monitoring sites shall be submitted to the RA no later than 7/1/11.	Ask for plan ASAP (public comment period required).	If the submitted plan does not meet the requirements: withhold approval of that portion	Shall	N	Y
18.	SO2 sites operational (by 1/1/2013)	58.10 (a)(6) and 58.13(d)	The plan shall provide for all required SO ₂ monitoring sites to be operational by January 1, 2013.	Add/correct in following year's plan and withhold approval of that portion.	Withhold approval of that portion	Plan shall provide for...	Y	Y
19.	CO plan for 2015 near-	58.10 (a)(7)	-A plan for establishing	Ask for plan ASAP	If the submitted plan	Shall	N	Y – starting

	ANP requirement	Citation within 40 CFR 58	Regulation	Action if info is missing (i.e., no information or incomplete) or incorrect	Action if req. is not met (assumes correct info submitted)	Notes on req.	Informs network adeq?	Critical for ANP app? ¹
	road sites by 7/1/2014	and 58.13(e)(1)	CO monitoring sites shall be submitted to the RA. Plans for required CO monitors shall be submitted at least 6 mos prior monitor establishment per sec 58.13. -CO monitors must be operating no later than 1/1/15 when in CBSAs > population, or 1/1/17 for other areas.	(public comment period required)	does not meet the requirements: withhold approval of that portion			in 2014 ANPs
20.	CO sites for first phase of CO monitors operational (by 1/1/2015)	58.10 (a)(7) and 58.13(e)(1)		Add/correct in following year's plan and withhold approval of that portion.	Withhold approval of that portion	Plan shall provide for...	Y – starting in 2015 ANPs	Y – starting in 2015 ANPs
21.	CO plan for 2017 near-road sites by 7/1/2016	58.10 (a)(7) and 58.13(e)(2)		Ask for plan ASAP (public comment period required).	If the submitted plan does not meet the requirements: withhold approval of that portion	Shall	N	Y – starting in 2016 ANPs
22.	CO sites for first phase of CO monitors operational (by 1/1/2017)	58.10 (a)(7) and 58.13(e)(2)		Add/correct in following year's plan and withhold approval of that portion.	Withhold approval of that portion	Plan shall provide for...	Y – starting in 2017 ANPs	Y – starting in 2017 ANPs
23.	AQS site identification number for each site	58.10 (b)(1)	The ANP Plan must contain the AQS site ID for each existing and proposed site.	Add/correct in following year's plan and withhold approval of that portion.	N/A – req. met if correct info submitted	Must contain following information	N	Y
24.	Location of each site: street address and geographic coordinates	58.10 (b)(2)	The ANP Plan must contain the location for each existing and proposed site.	Add/correct in following year's plan and withhold approval of that portion.	N/A – req. met if correct info submitted	Must contain following information	N	Y
25.	Sampling and analysis method(s) for each	58.10 (b)(3)	The ANP Plan must contain the sampling	Add/correct in following year's plan	N/A – req. met if correct info	Must contain following	N	Y

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	measured parameter		and analysis method(s) for each measured parameter for each existing and proposed site.	and withhold approval of that portion.	submitted	information		
26.	Operating schedule for each monitor (see items 62-66)	58.10 (b)(4)	The ANP Plan must contain the operating schedule for each existing and proposed site.	Add/correct in following year's plan and withhold approval of that portion.	If operating schedule does not meet req: withhold approval of that portion (can be monitor specific)	Must contain following information	Y	Y
27.	Any proposals to remove or move a monitoring station within a period of 18 months following plan submittal	58.10 (b)(5)	The ANP Plan must contain any proposals to remove or move a monitoring station within a period of 18 months following plan submittal for each monitor.	Add/correct in following year's plan and withhold approval of that portion.	N/A – req. met if correct info submitted	Must contain following information	Y	Y
28.	Scale of representativeness for each monitor as defined in Appendix D	58.10(b)(6); App D	The ANP Plan must contain the spatial scale of representativeness for each monitor for each existing and proposed site.	Add/correct in following year's plan and withhold approval of that portion.	N/A – req. met if correct info submitted	Must contain following information	Y	Y
29.	Identification of sites suitable and sites not suitable for comparison to the annual PM2.5 NAAQS as described in Part 58.30	58.10 (b)(7)	The ANP Plan must identify sites suitable/ not suitable for comparison to the annual PM2.5 NAAQS for each monitor for each existing and proposed site.	Add/correct in following year's plan and withhold approval of that portion.	N/A – req. met if correct info submitted	Must contain following information	Y	Y
30.	MSA, CBSA, CSA or other area represented by the monitor	58.10 (b)(8)	The ANP Plan must contain the MSA, CBSA, CSA or other area represented for each monitor for each	Add/correct in following year's plan and withhold approval of that portion.	N/A – req. met if correct info submitted	Must contain following information	N	Y

Comment [mk1]: This is moderate if method code is not given but minor if method code is given.

	ANP requirement	Citation within 40 CFR 58	Regulation	Action if info is missing (i.e., no information or incomplete) or incorrect	Action if req. is not met (assumes correct info submitted)	Notes on req.	Informs network adeq?	Critical for ANP app? ¹
			existing and proposed site					
31.	Designation of any Pb monitors as either source-oriented or non-source-oriented	58.10 (b)(9)	The ANP Plan must contain the designation of any Pb monitors as either source-oriented or non-source-oriented for each existing and proposed site.	Add/correct in following year's plan and withhold approval of that portion.	N/A – req. met if correct info submitted	Must contain following information	Y	Y
32.	Any source-oriented Pb site for which a waiver has been granted by EPA RA	58.10 (b)(10)	The ANP Plan must contain information for any source-oriented Pb site for which a waiver has been granted by EPA RA.	Add/correct in following year's plan and withhold approval of that portion.	N/A – req. met if correct info submitted	Must contain following information	Y	Y
33.	Any Pb monitor for which a waiver has been requested or granted by EPA RA for use of Pb-PM10 in lieu of Pb-TSP	58.10 (b)(11)	The ANP Plan must contain information for any monitor for which a waiver has been requested or granted by the RA for use of Pb-PM10 in lieu of Pb-TSP.	Add/correct in following year's plan and withhold approval of that portion.	N/A – req. met if correct info submitted	Must contain following information	Y	Y
34.	Identification of required NO2 monitors as either near-road or area-wide	58.10 (b)(12)	The ANP Plan must identify required NO2 monitors as either near-road or area-wide for each existing and proposed site.	Add/correct in following year's plan and withhold approval of that portion.	Withhold approval of that portion	Must contain following information	Y	Y
35.	Document how states and local agencies provide for the review of changes to a PM2.5 monitoring network that impact the location	58.10 (c)	The ANP Plan must document how states and local agencies provide for the review of changes to a PM2.5 monitoring network	Add/correct in following year's plan and withhold approval of that portion.	If the process for the review of changes to the PM2.5 network does not meet the req; withhold approval of that	must	N	Y

	ANP requirement	Citation within 40 CFR 58	Regulation	Action if info is missing (i.e., no information or incomplete) or incorrect	Action if req. is not met (assumes correct info submitted)	Notes on req.	Informs network adeq?	Critical for ANP app? ¹
	of a violating PM2.5 monitor. ²		that impact the location of a violating PM2.5 monitor.		portion.			
36.	Plan to modify the network that complies with findings of the 5-year network assessment. [Note: recommended to be submitted on year of network assessment or year after.]	58.10 (e) 58.14 (a)	-All proposed additions and discontinuations of SLAMS monitors in ANPs and periodic network assessments are subject to approval according to § 58.14. -The State, or where appropriate local, agency shall develop and implement a plan and schedule to modify the ambient air quality monitoring network that complies with the findings of the network assessments required every 5 years.	Add/correct in following year's plan and withhold approval of that portion.	If the plan would result in not meeting other requirements then withhold approval of that portion.	Shall develop and implement. Final plan subject to approval by RA.	N	N
37.	Precision/Accuracy reports submitted to AQS	58.16(a); App A, 1.3 and 5.1.1	Quality checks shall be reported to AQS.	Add/correct in following year's plan	N/A – req. met if correct info submitted	Must => WOE	N	N
38.	Annual data certification submitted	58.15 App. A 1.3	S/L/T agencies must submit a data certification letter by May 1 of each year.	Add/correct in following year's plan and withhold approval of that portion.	N/A – req. met if correct info submitted	Must => WOE	Y	Y
39.	Frequency of flow rate verification for manual PM samplers audit	App A 3.3.2	A one-point flow rate verification check must be performed at least once every month on each automated analyzer used to measure PM10.	Add/correct in following year's plan and withhold approval of that portion.	If frequency does not meet requirement then withhold approval of that portion.	Must => WOE	WOE	N

² The affected state or local agency must document the process for obtaining public comment and include any comments received through the public notification process within their submitted plan.

Comment [mk2]: Items 39-45 are all WOE. Suggest moderate for DV sites but minor for all other sites.

	ANP requirement	Citation within 40 CFR 58	Regulation	Action if info is missing (i.e., no information or incomplete) or incorrect	Action if req. is not met (assumes correct info submitted)	Notes on req.	Informs network adeq?	Critical for ANP app? ¹
40.	Frequency of flow rate verification for automated PM analyzers audit	App A 3.2.3	PM _{10-2.5} and PM _{2.5} . A one-point flow rate verification check must be performed at least once every month on each automated analyzer used to measure PM ₁₀ , PM _{10-2.5} and PM _{2.5} .	Add/correct in following year's plan and withhold approval of that portion.	If frequency does not meet requirement then withhold approval of that portion.	Must => WOE	WOE	N
41.	Frequency of one-point flow rate verification for Pb samplers audit	App A 3.3.4.1	PM ₁₀ high-vol and TSP are audited quarterly (PM ₁₀ low-vol audited monthly)	Add/correct in following year's plan and withhold approval of that portion.	If frequency does not meet requirement then withhold approval of that portion.	Must => WOE	WOE	N
42.	Frequency of one-point QC check (gaseous)	App A 3.2.1	At least once every 2 weeks	Add/correct in following year's plan and withhold approval of that portion.	If frequency does not meet requirement then withhold approval of that portion.	Must => WOE	WOE	N
43.	Date of last Annual Performance Evaluation (gaseous)	App A 3.2.2	-At least once/yr if QC checks are daily. -Twice per year if QC checks are every 2 weeks.	Add/correct in following year's plan and withhold approval of that portion.	If frequency does not meet requirement then withhold approval of that portion.	Must => WOE	WOE	N
44.	Dates of last two semi-annual flow rate audits for PM monitors	App A, 3.2.4 and 3.3.3	Every 6 months.	Add/correct in following year's plan and withhold approval of that portion.	If frequency does not meet requirement then withhold approval of that portion.	Must => WOE	WOE	N
45.	Dates of last two semi-annual flow rate audits for Pb monitors	App A, 3.3.4.1 and 3.3.3	Every 6 months.	Add/correct in following year's plan and withhold approval of that portion.	If frequency does not meet requirement then withhold approval of that portion.	Must => WOE	WOE	N
46.	PM _{2.5} co-location	App A 3.2.5	See appendix in 2012 memo for ANPs	Add/correct in following year's plan and withhold approval of that portion.	If co-location does not meet requirement then withhold approval of that	Must => WOE	Y	Y

	ANP requirement	Citation within 40 CFR 58	Regulation	Action if info is missing (i.e., no information or incomplete) or incorrect	Action if req. is not met (assumes correct info submitted)	Notes on req.	Informs network adeq?	Critical for ANP app? ¹
47.	Distance between co-located monitors	App A 3.2.5.6	The two collocated monitors must be within 4 meters of each other and at least 2 meters apart	Add/correct in following year's plan and withhold approval of that portion.	portion. Suggest corrective action.		N	N
48.	Manual PM10 method co-location met? (note: continuous PM10 does not have this requirement)	App A 3.3.1	15% for each "network of manual PM10 methods	Add/correct in following year's plan and withhold approval of that portion.	If co-location does not meet requirement then withhold approval of that portion.	Must => WOE	Y	Y
49.	Pb co-location	App A 3.3.4.3	1 st collocated site must be at highest site in the network (unless RA grants a waiver). Collocated samples at minimum 1:12. a) If have more than just Pb at NCore, must collocate at 15% of sites (at least one). b) If network only has Pb at NCore, part of national collocation network. Collocated monitors must be same method as primary.	Add/correct in following year's plan and withhold approval of that portion.	If co-location does not meet requirement then withhold approval of that portion.	Must => WOE	Y	Y
50.	PM10-2.5 co-location (note: only applies to Fresno and Phoenix NCore sites)	App A 3.3.6	National co-location scheme that only includes Fresno and Phoenix NCore.	Add/correct in next year's plan and include a comment in the detailed comments.	N/A – HQ req.	Must => WOE	N	N
51.	Required # of PM2.5 PEP audits	App A 3.2.7	-PQAO with <= 5 sites is required to have 5 valid PEP audits -PQAO with >= 5 sites is required to have 8 valid PEP audits	Check EPA records.	EPA adjusts schedule	EPA req.	Y	N
52.	Required # of Pb PEP audits	App A 3.3.4.4	-PQAO with <= 5 sites is required to have 1	Check EPA records.	EPA adjusts schedule	EPA req.	Y	N

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			valid PEP audits -PQAO with >= 5 sites is required to have 2 valid PEP audits					
53.	Required # NPAP audits (or approved equivalents)	App A 2.4	20% of all sites in each PQAO.	Check EPA records.	EPA adjusts schedule	EPA req.	Y	N
54.	Instrument/monitoring method code for each monitor: is it reported properly? Is it reported correctly (i.e., appropriate method code for regulatory monitors)?	App C	See appendix to 2012 ANP memo.	Add/correct in following year's plan and withhold approval of that portion.	N/A – req. met if correct info submitted	must	Y	Y
55.	Placeholder for: Optional request to have PM2.5 continuous instruments treated as non-FEMs and therefore not comparable to NAAQS?	Proposed rule and memo		Assume all FEM instruments are comparable to NAAQS (see previous item)	If the evidence to treat FEMs as non-FEMs is not compelling: withhold approval of that portion and treat all FEMs as regulatory monitors		Y – starts in 2013 ANP?	Y if request is included – starts in 2013 ANP?
56.	Start date for each monitor	Required to determine if other req. (e.g., min # and co-lo) are met	Self-explanatory	Add/correct in following year's plan and withhold approval of that portion.	N/A – req. met if correct info submitted	Must	Y – info is needed for valid DV determ. but can be obtained from AQS	Y
57.	Instrument monitor type for each monitor	Required to determine if other req. (e.g., min # and co-lo) are met	See appendix to 2012 ANP memo	Add/correct in following year's plan and withhold approval of that portion.	N/A – req. met if correct info submitted		Y – ID non-reg. monitors	Y
58.	Monitoring objective for each instrument	58.10 (b)(6) App D 1.1	The ANP Plan must contain monitoring	Add/correct in following year's plan	N/A – req. met if correct info	Must	N	Y

Comment [mk3]: This is important for PM monitors since it identifies FEMs vs. non-FEMs, which contributes to minimum monitoring requirements. Not important for non-PM so treat those as minor.

Comment [mk4]: Same comment as #25

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			objectives for each monitor for each existing and proposed site. -Monitoring networks must be designed to meet three basic monitoring objectives: (1) provide air pollution data to the general public in a timely manner, (2) support compliance with ambient air quality standards and emissions strategy development, and (3) support air pollution research studies.	and withhold approval of that portion.	submitted			
59.	Site type for each instrument	App D 1.1.1	At least one of the 6 site types should be listed for each instrument: 1. highest concentration 2. typical conc. in dense population area 3. source impact 4. general background 5. regional transport 6. welfare impacts (e.g., visibility or veg. impacts)	Add/correct in following year's plan and withhold approval of that portion.	N/A – req. met if correct info submitted		Y	Y
60.	Instrument parameter code for each instrument	Required to determine if other req.	See 2012 ANP memo appendix.	Add/correct in following year's plan and withhold approval	N/A – req. met if correct info submitted		Y	Y

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		(e.g., min # and co-lo) are met		of that portion.				
61.	Instrument parameter occurrence code for each instrument	Required to determine if other req. (e.g., min # and co-lo) are met	See 2012 ANP memo appendix	Add/correct in following year's plan and withhold approval of that portion.	N/A – req. met if correct info submitted		N	N
62.	Sampling season for ozone (note: date of waiver approval must be included if the sampling season deviates from requirement)	App D 4.1(i)	-ozone: sampling season is year-round for all states in R9	Add/correct in following year's plan and withhold approval of that portion.	If sampling season does not meet requirements or a deviation has not been approved; withhold approval of that portion	must	Y	Y
63.	Sampling schedule for PM2.5 - applies to year-round and seasonal sampling schedules (note: date of waiver approval must be included if the sampling season deviates from requirement)	58.12(d) App D 4.7	-1:3 (must at NCore and required reg background and reg transport sites) -Waiver for 1:6 at required SLAMS if data is not 5-10% away from either NAAQS and not 1 or more exceedances for prev 3 years AND cont. monitor also operating at site -Daily if DV site and 5% of 24-hr NAAQS -Speciation at STN must be 1:3	Add/correct in following year's plan and withhold approval of that portion.	If sampling schedule does not meet requirements or a deviation has not been approved; withhold approval of that portion	must	Y	Y
64.	Sampling schedule for PM10	58.12(e) App D 4.6	See Figure 1 in 58.12(e) – use max concentration to determine required sampling frequency.	Add/correct in following year's plan and withhold approval of that portion.	If sampling schedule does not meet requirements or a deviation has not been approved; withhold approval of	must	Y	Y

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65.	Sampling schedule for Pb	58.12(b) App D 4.5	1:6 day sampling schedule	Add/correct in following year's plan and withhold approval of that portion.	that portion If sampling schedule does not meet requirements or a deviation has not been approved; withhold approval of that portion	Must collect at 1:6 unless waiver	Y	Y
66.	Sampling schedule for PM10-2.5	58.12(f) App D 4.8	-1:3 (must at NCore if no continuous PM10-2.5 FEMs) -PM10-2.5 speciation at NCore must operate 1:3	Add/correct in following year's plan and withhold approval of that portion.	If sampling schedule does not meet requirements or a deviation has not been approved; withhold approval of that portion	Must collect at 1:3	N	Y
67.	Minimum # of monitors for O3[Note: should be supported by MSA ID, MSA population, DV, # monitors, and # required monitors]	App D, 4.1(a) and Table D-2	SLAMS & NCore are min # per Table D-2 unless approved by RA. (b) Within an O ₃ network, at least one O ₃ site for each MSA, or CSA if multiple MSAs are involved, must be designed to record the maximum concentration for that particular metropolitan area.	Add/correct in following year's plan and withhold approval of that portion. Note other items if they are part of the incomplete/incorrect information.	If minimum monitoring requirements known to be not met; disapprove that portion.	must	Y	Y
68.	Identification of max. conc. O3 monitor(s)	App. D, 4.1 (b)		Add/correct in following year's plan and withhold approval of that portion. Note other items if they are part of the incomplete/incorrect information.	If minimum monitoring requirements known to be not met; disapprove that portion.			
69.	Minimum monitoring requirements met for	App. D, 4.3.2	See relevant CFR section	Add/correct in following year's plan	If minimum monitoring	must	Y	Y

	ANP requirement	Citation within 40 CFR 58	Regulation	Action if info is missing (i.e., no information or incomplete) or incorrect	Action if req. is not met (assumes correct info submitted)	Notes on req.	Informs network adeq?	Critical for ANP app? ¹
	near-road NO2			and withhold approval of that portion.	requirements are not met: withhold approval of that portion			
70.	Minimum monitoring requirements met for area-wide NO2	App. D, 4.3.3	See relevant CFR section	Add/correct in following year's plan and withhold approval of that portion.	If minimum monitoring requirements are not met: withhold approval of that portion			
71.	Minimum monitoring requirements met for RA-40 NO2	App. D, 4.3.4	See list of R9 RA-40 monitors	Add/correct in following year's plan and withhold approval of that portion.	If minimum monitoring requirements are not met: withhold approval of that portion			
72.	Minimum monitoring requirements met for SO2	App D, 4.4	Must satisfy PWEI and be: -within CBSA boundary and be site type of: pop exposure, highest conc, source impacts, bkgd, or transport; or -Can be outside CBSA if assesses the highest concentration for significant sources/source categories existing within CBSA. May be micro, middle, or neighborhood scale for max concentrations; may be urban scale for trends/ transport/ background.	Add/correct in following year's plan and withhold approval of that portion.	If minimum monitoring requirements known to be not met: disapprove that portion.	must	Y	Y
73.	Minimum monitoring	App D		Add/correct in	If minimum	must	Y – starting	Y – starting

	ANP requirement	Citation within 40 CFR 58	Regulation	Action if info is missing (i.e., no information or incomplete) or incorrect	Action if req. is not met (assumes correct info submitted)	Notes on req.	Informs network adeq?	Critical for ANP app? ¹
	requirements met for CO			following year's plan and withhold approval of that portion.	monitoring requirements known to be not met: disapprove that portion.		in 2015 ANP	in 2015 ANP
74.	Minimum monitoring requirements met for Pb	App D 4.5; 58.13(a)	non airport sources >= 0.5 tpy; airports >= 1 tpy; at max concentration site taking into account logistics and population exposure; most appropriate scale = micro or middle), including for Pb at NCore (CBSAs with population of 500,000 or more; most appropriate scale = neighborhood.	Add/correct in following year's plan and withhold approval of that portion.	If minimum monitoring requirements known to be not met: disapprove that portion.	must	Y	Y
75.	Minimum # of monitors for PM2.5 [Note: should be supported by MSA ID, MSA population, DV, # monitors, and # required monitors]	App D 4.7.1(a) and Table D-5	SLAMS & NCore are min # per Table D5unless approved by RA	Add/correct in following year's plan and withhold approval of that portion.	If minimum monitoring requirements known to be not met: disapprove that portion.	must	Y	Y
76.	Required PM2.5 sites represent community-wide air quality	App D 4.7.1(b)	Required stations must represent community-wide air quality; neighborhood or urban scale (note: can be micro or middle scale if RA determines they represent many such locations in the metropolitan area)	Add/correct in following year's plan and withhold approval of that portion.	If minimum monitoring requirements are not met: withhold approval of that portion	must	Y	Y
77.	For PM2.5, is at least	App D	Sites identified as	Add/correct in	If minimum	Is to be sited	Y	Y

	ANP requirement	Citation within 40 CFR 58	Regulation	Action if info is missing (i.e., no information or incomplete) or incorrect	Action if req. is not met (assumes correct info submitted)	Notes on req.	Informs network adeq?	Critical for ANP app? ¹
	one site in a population-oriented area of expected maximum concentration	4.7.1(b)(1)	population-oriented or population exposure plus high concentration meet this requirement.	following year's plan and withhold approval of that portion.	monitoring requirements known to be not met: disapprove that portion.			
78.	If >1 SLAMS PM2.5 required, is there a site in an area of poor air quality	App D 4.7.1(b)(2)	If there are two sites, one of which exceeds the standards then this requirement is met.	Add/correct in following year's plan and withhold approval of that portion.	If minimum monitoring requirements are not met: withhold approval of that portion	Is to be sited	N	Y
79.	Minimum monitoring requirements for continuous PM2.5	App D 4.7.2	# equal to half the required SLAMS (round up) -If required, at least one collocated with a FRM/FRM/ARM -Must use methods and QA/QC approved by EPA RA	Add/correct in following year's plan and withhold approval of that portion.	If minimum monitoring requirements are not met: withhold approval of that portion	must	N	Y
80.	Requirements for PM2.5 background and transport sites.	App D 4.7.3	Is there at least one regional background and one regional transport site in each state? (with EPA approved methodologies and QA/QC, can be non-FEMs)	N/A for all plans except state plans (i.e., ADEQ, CARB, HDOH, and NDEP). Add/correct in following year's plan and withhold approval of that portion.	N/A for all plans except state plans (i.e., ADEQ, CARB, HDOH, and NDEP). If minimum monitoring requirements are not met: withhold approval of that portion	Must	N	Y
81.	Are PM2.5 Chemical Speciation requirements met for official STN sites?	App D 4.7.4	Check sites and sampling frequency. Look at list of official sites.	Add/correct in following year's plan and withhold approval of that portion.	Official STN sites should be operational and at the required sampling frequency. If not, withhold approval of that portion. Notify HQ.	Shall continue		
82.	Spatial Averaging for	App D 4.7.5						

	ANP requirement	Citation within 40 CFR 58	Regulation	Action if info is missing (i.e., no information or incomplete) or incorrect	Action if req. is not met (assumes correct info submitted)	Notes on req.	Informs network adeq?	Critical for ANP app? ¹
	comparison to Annual NAAQS: are intended CMZs defined and met criteria in 40 CFR 50 App N?							
83.	Minimum # of monitors for PM10 [Note: should be supported by MSA ID, MSA population, DV, # monitors, and # required monitors]	App D, 4.6(a) and Table D-4	See Table D-4 for minimum required sites. Use max conc. and compare to 150µg/m3 to determine H/M/L conc.	Add/correct in following year's plan and withhold approval of that portion.	If minimum monitoring requirements known to be not met: disapprove that portion.	must	Y	Y
84.	Minimum monitoring requirements met for PM10-2.5 mass and speciation	App D 4.8	-The only required monitors for PM _{10-2.5} are those required at NCore Stations.	Add/correct in following year's plan and withhold approval of that portion.	If minimum monitoring requirements are not met: withhold approval of that portion.	must	N	Y
85.	Distance of site from nearest road	App E 6	Monitor placement from roads vary by pollutant. See App. E, section 6 for specific information for O ₃ , CO, PM _{2.5} , PM ₁₀ , and NO ₂ .	Add/correct in following year's plan and withhold approval of that portion.	Withhold approval of that portion of ANP and work with agency on corrective action.	followed to the maximum extent possible	N	N
86.	Traffic count of nearest road	App E 6	Needed to judge distance to road req.	Add/correct in following year's plan and withhold approval of that portion.	Withhold approval of that portion of ANP and work with agency on corrective action.	followed to the maximum extent possible	N	N
87.	Groundcover	App E, 3(a)	Ground cover should be listed but there is no specific requirement to meet. Unpaved areas should be noted.	Add/correct in following year's plan and withhold approval of that portion.	If groundcover is inappropriate, withhold approval of that portion and work with agency on corrective action.	followed to the maximum extent possible	N	N
88.	Probe height	App E 2	2-15 m above the ground, unless micro-scale CO which must	Add/correct in following year's plan and withhold approval	Withhold approval of that portion of ANP and work with	followed to the maximum extent possible	N	N

	ANP requirement	Citation within 40 CFR 58	Regulation	Action if info is missing (i.e., no information or incomplete) or incorrect	Action if req. is not met (assumes correct info submitted)	Notes on req.	Informs network adeq?	Critical for ANP app? ¹
			be 2.5-3.5 m above the ground	of that portion.	agency on corrective action.			
89.	Distance from supporting structure	App E 2	The probe must be at least 1 meter vertically or horizontally away from any supporting structure, walls, parapets, penthouses, etc.	Add/correct in following year's plan and withhold approval of that portion.	Withhold approval of that portion of ANP and work with agency on corrective action.	followed to the maximum extent possible	N	N
90.	Distance from obstructions on roof	App E, 4(b)	A probe, inlet, or monitoring path must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.	Add/correct in following year's plan and withhold approval of that portion.	Withhold approval of that portion and work with agency on corrective action.	followed to the maximum extent possible	N	N
91.	Distance from obstructions not on roof	App E, 4(a)	The probe must have unrestricted airflow and be located away from obstacles. The distance from the obstacle to the probe, inlet, or monitoring path must be at least twice the height that the obstacle protrudes above the probe, inlet, or monitoring path.	Add/correct in following year's plan and withhold approval of that portion.	Withhold approval of that portion and work with agency on corrective action.	followed to the maximum extent possible	N	N

Comment [mk5]: Items 90-94 are case-specific. A flue on the roof adjacent to the DV PM2.5 monitor or a leafy tree next to the DV ozone monitor are moderate problems but others are likely minor.

	ANP requirement	Citation within 40 CFR 58	Regulation	Action if info is missing (i.e., no information or incomplete) or incorrect	Action if req. is not met (assumes correct info submitted)	Notes on req.	Informs network adeq?	Critical for ANP app? ¹
92.	Distance from trees	App E 5	The probe must be at least 10 meters or further from the drip line of trees.	Add/correct in following year's plan and withhold approval of that portion.	Withhold approval of that portion and work with agency on corrective action.action.	followed to the maximum extent possible	N	N
93.	Distance to furnace or incinerator flue	App E 3(b)	The probe must be away from furnace or incineration flues or other minor sources of SO ₂ or NO. The separation distance should take into account the heights of the flues, type of waste or fuel burned, and the sulfur content of the fuel.	Add/correct in following year's plan and withhold approval of that portion.	Withhold approval of that portion and work with agency on corrective action.	followed to the maximum extent possible	N	N
94.	Unrestricted airflow	App E, 4(a) and 4(b)	-The probe or inlet must have unrestricted airflow and be located away from obstacles. The distance from the obstacle to the probe, inlet, or monitoring path must be at least twice the height that the obstacle protrudes above the probe, inlet, or monitoring path. -A probe, inlet, or monitoring path must have unrestricted airflow in an arc of at least 180 degrees.	Add/correct in following year's plan and withhold approval of that portion.	Withhold approval of that portion and work with agency on corrective action.	followed to the maximum extent possible	N	N
95.	Probe material (if applicable)	App E 9	Borosilicate glass or FEP Teflon.	Add/correct in following year's plan and withhold approval of that portion.	Withhold approval of that portion of ANP and work with agency on corrective	followed to the maximum extent possible	N	N

	ANP requirement	Citation within 40 CFR 58	Regulation	Action if info is missing (i.e., no information or incomplete) or incorrect	Action if req. is not met (assumes correct info submitted)	Notes on req.	Informs network adeq?	Critical for ANP app? ¹
96.	Residence time (if applicable)	App E 9	Sampling probes for reactive gas (SO ₂ , NO ₂ , and O ₃) monitors at must have a sample residence time less than 20 seconds.	Add/correct in following year's plan and withhold approval of that portion.	Withhold approval of that portion of ANP and work with agency on corrective action.	followed to the maximum extent possible	N	N
97.								
98.	Not required as part of plan but good to check							
99.	For SPMs listed as non-regulatory, note the start Date of FRM/FEM/ARM at SPM. If > 24 months, agency must supply information that App A, C or E requirements were not met	58.20(c) – (e)	All data from an SPM using an FRM, FEM, or ARM which has operated for more than 24 months is eligible for comparison to the relevant NAAQS, subject to the conditions of § 58.30, unless the air monitoring agency demonstrates that the data came from a particular period during which the requirements of appendix A, appendix C, or appendix E to this part were not met in practice. See § 58.30(d) & (e) if a monitor was discontinued within 24 months of start-up.			Need info to judge comparability to NAAQS	N	N
100.								
101.								

Public Comments on Annual Network Plan

Were comments submitted to the S/L/T agency during the public comment period?

If no, skip the remaining questions.

If yes:

- Were any of the comments substantive?
 - If yes, which ones?
 - Explain basis for determination if any comments were considered not substantive:
- Did the agency respond to the substantive comments?
 - If yes, was the response adequate?
- Do the substantive comments require separate EPA response (i.e., agency response wasn't adequate)?
- Are the sections of the annual network plan that received substantive comments approvable after consideration of comments?
 - If yes, provide rationale:

Comments

Use a weight of evidence approach.

For the letter, use some language like:

Based on the information that is in the Annual Network Plan, [EPA has determined that the Annual Network Plan meets the requirements listed in 40 CFR 58.10, except for ...] (use R1 language)

Create letter for late plans requesting whether plan will be submitted or confirming that there have been no changes.

Put in some order that is useful for review.

Add items that are not requirements but good to check – at end of checklist.

Add list of acronyms